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Nov 24, 1983

DERWENT-ACC-NO: 1983-827768

DERWENT-WEEK: 198348

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TITLE: HV make and break switch - has one contact operated quarter cycle after other contact by common mechanism

INVENTOR: HARZ, G

PATENT-ASSIGNEE:

ASSIGNEE

CODE

SACHSENW LICHT & KR

LICHN

PRIORITY-DATA: 1982DE-3218907 (May 19, 1982)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE <u>3218907</u> A	November 24, 1983		015	

INT-CL (IPC): H01H 33/14

ABSTRACTED-PUB-NO: DE 3218907A

BASIC-ABSTRACT:

The switch has two pairs of contacts inside respective parts of a sealed housing and also in line, has the moving contact of each pair operated by a common switching mechanism between them. One moving contact is operated a quarter of a period of the a.c. supply to be disconnected, after the other moving contact.

The switching mechanism also operates so that the first pair of contacts is closed again shortly after the second contact has opened. The first moving contact is closed again only when arcing occurs across a gap between 0.5 and 1 mm wide. The switching action is controlled by a pair of spring loaded swinging arms travelling over respective surfaces of a slider between them. These surfaces are differently shaped to give the required switching action.

CHOSEN-DRAWING: Dwg.0/3

T ITLE-TERMS: HV BREAK SWITCH ONE CONTACT OPERATE QUARTER CYCLE AFTER CONTACT COMMON MECHANISM

DERWENT-CLASS: X13

EPI-CODES: X13-A02; X13-B02; X13-B04;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N1983-212112

DERWENT-ACC-NO: 2001-266386

DERWENT-WEEK: 200316

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TITLE: Vacuum contactor arrangement - uses armature having
initial pre-travel path with prescribed ratio to capture
or pull-in path

INVENTOR: DREXLER, J; KOPPMANN, B ; KROPP, M ; MEIER, M ;
MITLMEIER, N

PATENT-ASSIGNEE: SIEMENS AG[SIEI]

PRIORITY-DATA: 1999DE-1047836 (October 5, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES
MAIN-IPC			
CN 1378696 A	November 6, 2002	N/A	000 H01H
033/66			
WO 200126127 A1	April 12, 2001	G	018 H01H 033/66
DE 19947836 C1	July 5, 2001	N/A	000 H01H 050/64
EP 1218905 A1	July 3, 2002	G	000 H01H 033/66

DESIGNATED-STATES: CN US AT BE CH CY DE DK ES FI FR GB GR IE IT
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APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
CN 1378696A	N/A	2000CN-0813924	October 5, 2000
WO 200126127A1	N/A	2000WO-DE03504	October 5, 2000
DE 19947836C1	N/A	1999DE-1047836	October 5, 1999
EP 1218905A1	N/A	2000EP-0979409	October 5, 2000

EP 1218905A1 N/A 2000WO-DE03504 October 5, 2000

EP 1218905A1 Based on WO 200126127 N/A

INT-CL (IPC): H01H033/66, H01H033/666 , H01H050/64

ABSTRACTED-PUB-NO: DE 19947836C

BASIC-ABSTRACT:

A vacuum contactor has a housing (1) a drive coil (2) an armature (3) an actuation element (4) and at least one vacuum contact. The drive coil (2), when receiving a starting current (IA) deflects the armature (3) from a quiescent position into an armature-actuation position (AB) and as a result of the deflection of the armature, the actuating element (4) is deflected from a quiescent position (ER) into an element- actuation position (EB), which results in actuation of at least one vacuum contact.

With deflection of the armature into the armature-actuation position (AB), the armature (3) initially passes through a pre- travel path (sV) and then through a pull-in/capture path (sM) and the actuation element (4) is only deflected by the armature during the course of the capture path (sM). The ratio of the pre-travel path to the capture path is between 1:3 and 3:1.

ADVANTAGE - Snap-action characteristic obtained without series- connected drive electronics.

ABSTRACTED-PUB-NO: WO 200126127A

EQUIVALENT-ABSTRACTS:

A vacuum contactor has a housing (1) a drive coil (2) an armature (3) an actuation element (4) and at least one vacuum contact. The drive coil (2), when receiving a starting current (IA) deflects the armature (3) from a quiescent position into an armature-actuation position (AB) and as a result of the deflection of the armature, the actuating element (4) is deflected from a quiescent position (ER) into an element- actuation position (EB), which results in actuation of at least one vacuum contact.

With deflection of the armature into the armature-actuation position (AB), the armature (3) initially passes through a pre- travel path (sV) and then through

a pull-in/capture path (sM) and the actuation element (4) is only deflected by the armature during the course of the capture path (sM). The ratio of the pre-travel path to the capture path is between 1:3 and 3:1.

ADVANTAGE - Snap-action characteristic obtained without series- connected drive electronics.

CHOSEN-DRAWING: Dwg.1/3

TITLE-TERMS: VACUUM CONTACT ARRANGE ARMATURE INITIAL PRE
TRAVEL PATH PRESCRIBED
RATIO CAPTURE PULL PATH

DERWENT-CLASS: X13

EPI-CODES: X13-A04G5C;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2001-190491

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技術表示箇所

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(22) 出願日 平成6年(1994)1月20日

(71) 出願人 000005108

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(74) 代理人 弁理士 小川 勝男

(54) 【発明の名称】 真空接触器

(57) 【要約】

【構成】真空接触器に真空インタラプタ5を用いて、操作部に戻しばね20を設け、操作部と可動接触子8の連結部に遊びを持たせた両方向の係合部を設けて構成する。

【効果】真空インタラプタの機械的な寿命を長寿命化でき、低価格で保守の省力化が可能な接触器を提供することが出来る。

図 1

